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| 09/659,500      | 09/11/2000  | Joaquim Geraldo Cretella | 10831-021001        | 5069             |

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MICHAEL BEST & FRIEDRICH LLP  
3773 CORPORATE PARKWAY  
SUITE 360  
CENTER VALLEY, PA 18034-8217

EXAMINER

RAPP, CHAD

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2125

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

3

## Office Action Summary

Application No.

09/659,500

Applicant(s)

CRETELLA ET AL.

Examiner

Chad Rapp

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-27 are presented for examination.
2. Claims 23-27 have been cancelled by applicant.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, line 5 “the database” should be changed to “a database”. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al. in view of Roehrich et al.

Finn et al. teaches the claimed invention (claim 1) substantially as claimed including a method comprising :

- a. Receiving into a database a cargo identification is taught as the cargo is identified by an inventory control number embedded in a barcode(col. 16 lines 8-9);

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b. Retrieving from the database an environment-control parameter as a function of the identified cargo is taught as the barcode scanner scans the barcode on the cargo and communicates with the monitor and determines via its database what the crate contains and what is should monitor(col. 17 lines 26-31 and col. 16 lines 3-4).

Finn et al. teaches the above listed details of the independent claim 1, Finn et al. does not teach: providing a controller coupled to an environment-adjusting system, providing a database communicatively connected to the controller and regulating the environment-adjusting system with the controller to adjust an environment of a conditioned space of an environment-controlled transport unit upon the environment-control parameter communicated from the database to the controller.

Roehrich et al. teaches :

a. Providing a controller coupled to an environment-adjusting system is taught as a controller(66) is coupled to the refrigeration system(fig. 1);

b. Providing a database communicatively connected to the controller is taught as a ROM(67) with a look-up table coupled to the controller (66)(col. 9 lines 59-68 and fig. 1);

c. Regulating the environment-adjusting system with the controller to adjust an environment of a conditioned space of an environment-controlled transport unit upon the environment-control parameter communicated from the database to the controller is taught as using calculations from the ROM and the look up table which is received by the controller. The controller receives the optimum condition for the transport refrigeration system and controls the heat exchanges to bring the condition back to within acceptable ranges(col. 9 line 59 to col. 10 line 39).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Finn et al. with the teachings of Roehrich et al. because both patents deal with conditioning of a space especially cargo carrying vehicles and each have databases with look-up tables. The Roehrich et al. patent deals with a refrigeration system for a refrigeration vehicle and has direct connection of the Rom (with look-up tables and calculations) to the controller. So as soon, a parameter is outside of the acceptable range the controller can act quickly to control field devices (such as heat exchangers) to get the system parameters back in line. Using the Roehrich design the system becomes versatile and adaptable because in using the controller many different conditions can be monitored and many different devices can be controlled.

As to claim 2, it would have been obvious to one of ordinary skill in the art at the time the invention was made or used to present to the user a menu of cargo options because it is well known that an interface with a computer system that contains lists can be menu driven.

As to claim 3, it would have been obvious to one of ordinary skill in the art at the time the invention was made or used wherein the menu of cargo options includes media representations because various program with a menu can have number for the selection.

As to claim 4, Finn et al. teaches that wherein the environment-control parameter is at least one of temperature set point, temperature range, time-out-of-range, optimum mode of operation, humidity, lighting conditions, atmospheric conditions and defrosting constraints is taught as the temperature and humidity (col. 17 line 1).

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As to claim 5, Finn et al. teaches that presenting the user the option to set the parameter manually is taught as the range of acceptable conditions can be related or set with a data entry device(col. 18 lines 25-27 and col. 21 line 65 to col. 22 line 9).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al. in view of Roehrich et al.

Finn et al. teaches the claimed invention (claim 6) substantially as claimed including an article comprising a computer-readable medium which stores computer-executable instructions for controlling an environment of a conditioned space in an environment-controlled transport unit for transporting cargo comprising :

- a. Receive into the database a cargo identification is taught as the cargo is identified by an inventory control number embedded in a barcode(col. 16 lines 8-9);
- b. Retrieve from the database an environment-control parameter as a function of the identified cargo is taught as the barcode scanner scans the barcode on the cargo and communicates with the monitor and determines via its database what the crate contains and what is should monitor(col. 17 lines 26-31 and col. 16 lines 3-4).

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Finn et al. teaches the above listed details of the independent claim 1, Finn et al. does not teach: regulate the environment-adjusting system with the controller to adjust an environment of a conditioned space of an environment-controlled transport unit upon the environment-control parameter communicated from the database to the controller.

Roehrich et al. teaches :

a. Regulate the environment-adjusting system with the controller to adjust an environment of a conditioned space of an environment-controlled transport unit upon the environment-control parameter communicated from the database to the controller is taught as using calculations from the ROM and the look up table which is received by the controller. The controller receives the optimum condition for the transport refrigeration system and controls the heat exchanges to bring the condition back to within acceptable ranges(col. 9 line 59 to col. 10 line 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Finn et al. with the teachings of Roehrich et al. because both patents deal with conditioning of a space especially cargo carrying vehicles and each have databases with look-up tables. The Roehrich et al. patent deals with a refrigeration system for a refrigeration vehicle and has direct connection of the Rom (with look-up tables and calculations) to the controller. So as soon, a parameter is outside of the acceptable range the controller can act quickly to control filed devices(such as heat exchangers) to get the system parameters back in line. Using the Roehrich et al. design the system becomes versatile and adaptable because in using the controller many different conditions can be monitored and many different devices can be controlled.

As to claim 7, it would have been obvious to one of ordinary skill in the art at the time the invention was made or used to present to the user a menu of cargo options because it is well known that an interface with a computer system that contains lists can be menu driven.

As to claim 8, it would have been obvious to one of ordinary skill in the art at the time the invention was made or used wherein the menu of cargo options includes media representations because various program with a menu can have number for the selection.

As to claim 9, Finn et al. teaches that wherein the environment-control parameter is at least one of temperature set point, temperature range, time-out-of-range, optimum mode of operation, humidity, lighting conditions, atmospheric conditions and defrosting constraints is taught as the temperature and humidity(col. 17 line1).

As to claim 10, Finn et al. teaches that presenting the user the option to set the parameter manually is taught as the range of acceptable conditions can be related or set with a data entry device(col. 18 lines 25-27 and col. 21 line 65 to col. 22 line 9).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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10. Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al. in view of Roehrich et al.

Finn et al. teaches the claimed invention (claim 11) substantially as claimed including an environmental control system comprising:

- a. An environment-adjusting system configured to adjust the environment of a conditioned space is taught as the monitoring control system(col. 5 lines 11-18 and fig. 12);
- b. Wherein the database comprises a cargo identification and an environment-control parameter as a function of the cargo identification is taught as the barcode scanner scans the barcode on the cargo and communicates with the monitor and determines via its database (which contains multiple look up tables that contains data of interest) what the crate contains and what is should monitor. The controller manages this database(col. 17 lines 26-31, col. 16 lines 3-4 and col. 21 lines 41-47);
- c. An input device coupled to the controller is taught as an entry device is connected to the controller(see fig. 12);
- d. Wherein the controller is configured upon selection of a cargo identification by way of the input device to retrieve the environment-control parameter as a function of the cargo identification from the database is taught as an operator can use the data entry device to enter data that is transmitted to the monitor which has the memory that contains the relational data base that contains the data look up tables(col. 21 line 41 to col. 22 line 25).

Finn et al. teaches the above listed details of the independent claim 11, however, Finn et al. does not teach: controller coupled to the environment-adjusting system and configured

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to regulate the environment-adjusting system and a database communicatively connected to the controller

Roehrich et al. teaches :

a. Controller coupled to the environment-adjusting system and configured to regulate the environment-adjusting system is taught as a controller(66) is coupled to the refrigeration system(fig. 1);

b. A database communicatively connected to the controller is taught as a ROM(67) with a look-up table coupled to the controller (66)(col. 9 lines 59-68 and fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Finn et al. with the teachings of Roehrich et al. because both patents deal with conditioning of a space especially cargo carrying vehicles and each have databases with look-up tables. The Roehrich et al. patent deals with a refrigeration system for a refrigeration vehicle and has direct connection of the Rom (with look-up tables and calculations) to the controller. So as soon, a parameter is outside of the acceptable range the controller can act quickly to control filed devices(such as heat exchangers) to get the system parameters back in line. Using the Roehrich et al. design the system becomes versatile and adaptable because in using the controller many different conditions can be monitored and many different devices can be controlled.

As to claim 12, Finn et al. teaches wherein the input device includes at least one of a keypad, a touch screen, a keyboard, a mouse and a personal computer is taught as a keyboard(col. 21 lines 67).

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As to claim 13, Finn et al. teaches comprising an output device is taught as a display(col. 22 line 23).

As to claim 14, Finn et al. teaches wherein the output device includes at least one of a display screen, a touch screen and a personal computer is taught as a display(col. 22 line 23).

As to claim 15, Finn et al. teaches wherein the output device is configured to display alphanumeric and graphic data is taught as a map(col. 21 lines 7-13).

As to claim 16, Finn et al. teaches comprising a sensor coupled to the controller is taught as a sensor. The sensor is couple to the controller through the radio transmitter and the asset monitor communication means(col. 15 lines 30 and fig. 12).

As to claim 17, Finn et al. teaches comprising an external communication interface is taught t as the impulse radio transmitter(col. 16 lines 43-46).

As to claim 18, Finn et al. teaches wherein the external communication interface is configured to establish a communication connection by radio frequency signal, infrared signal, satellite link or cellular telephone is taught as an impulse radio transmission(col. 15 lines 53-54).

As to claim 19, Finn et al. teaches wherein the database comprises a plurality of cargo identifications and a plurality of environment-control parameters as a function of each cargo identification in the database is taught as the large scale relational database (col. 21 lines 41-47).

As to claim 20, Finn et al. teaches wherein the environment-adjusting system includes at least one of a refrigeration system, humidifier, lighting system, dehumidifier, atmosphere regulator and venting system is taught as a refrigerator unit(col. 14 lines 42-50).

As to claim 21, Finn et al. teaches comprising memory coupled to the controller, wherein the database resides in the memory is taught as a database of the monitor is contained within its

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memory and the monitor with its memory is coupled to controller through communications means(col.17 lines 24-31, col. 41-47 and fig. 12).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12.  
11. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finn et al. in view of Roehrich et al.

Finn et al. teaches the claimed invention (claim 22) substantially as claimed including an environment-controlled transport unit comprising:

a. A container defining a conditioned space is taught as cargo 1134(col. 16 lines 26 and fig. 12);

b. An environment control system configured to receive into a database a cargo identification and to retrieve from the database an environment-control parameter as a function of the cargo identification is taught as monitoring control system(col. 5 lines 11-18 and fig. 12).

Finn et al. teaches the above listed details of the independent claim 22, however, Finn et al. does not teach: wherein the environment control system is configured to regulate an environment adjusting system with a controller to adjust an environment of the conditioned space based upon the environment-control parameter communicated from the database to the controller.

Roehrich et al. teaches :

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a. Wherein the environment control system is configured to regulate an environment adjusting system with a controller to adjust an environment of the conditioned space based upon the environment-control parameter communicated from the database to the controller is taught as using calculations from the ROM and the look up table which is received by the controller. The controller receives the optimum condition for the transport refrigeration system and controls the heat exchanges to bring the condition back to within acceptable ranges(col. 9 line 59 to col. 10 line 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Finn et al. with the teachings of Roehrich et al. because both patents deal with conditioning of a space especially cargo carrying vehicles and each have databases with look-up tables. The Roehrich et al. patent deals with a refrigeration system for a refrigeration vehicle and has direct connection of the Rom (with look-up tables and calculations) to the controller. So as soon, a parameter is outside of the acceptable range the controller can act quickly to control filed devices(such as heat exchangers) to get the system parameters back in line. Using the Roehrich design the system becomes versatile and adaptable because in using the controller many different conditions can be monitored and many different devices can be controlled.

### *Conclusion*

13.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Rapp whose telephone number is (703)306-4528. The examiner can normally be reached on Mon-Fri 11:00-7:00.

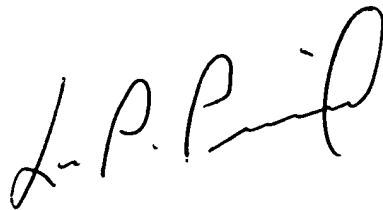
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703)308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chad Rapp  
Examiner  
Art Unit 2125

cjr

A handwritten signature in black ink, appearing to read "L. P. Picard", with a stylized flourish at the end.

LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100